Hepatoprotective Triterpenes from Hairy Root Cultures of Ocimum basilicum L.

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Six triterpene acids identified as betulinic, oleanolic, ursolic, 3-epimaslinic, alphitolic and euscaphic acids have been isolated from a dichloromethane extract of hairy root cultures of Ocimum basilicum L. (Lamiaceae). These cultures were obtained by genetic transformation using Agrobacterium rhizogenes. The extract as well as the isolated compounds were evaluated for their hepatoprotective activity by measuring their effect on the oxidative stress status of liver, induced by carbon tetrachloride, in albino rats and in liver homogenate in vitro. All tested compounds displayed hepatoprotective activity comparable to oleanolic and ursolic acids.

Key words: Ocimum basilicum, Hairy Root Cultures, Hepatoprotective Triterpenes